

## ARCHITECTURE FOR A FLEXIBLE AND HIGH-PERFORMANCE GATEWAY CABLE MODEM

### Abstract

[32] A cable modem system and architecture. A cable modem engine performs all  
5 cable modem functions, and a data networking engine performs all data and home  
networking functions. The cable modem engine is completely partitioned from the data  
networking engine. DOCSIS and VoIP functionality is implemented in the cable modem  
engine. The VoIP functionality may be in accordance with the PacketCable specification.  
The data networking functionality provided by the data networking engine may be in  
10 accordance with the CableHome specification.